

# **ASSOCIATED TRANSPORTATION ENGINEERS**

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08031L03.WP

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# FINAL TRAFFIC IMPACT ANALYSIS FOR THE ESTRELLA RIVER VINEYARD AGRICULTURAL CLUSTER SUBDIVISION (TRACT 2905), COUNTY OF SAN LUIS OBISPO COUNTY

Associated Transportation Engineers (ATE) has completed this final traffic impact analysis for the Estrella River Vineyard Agricultural Cluster Subdivision (Tract 2905), proposed in the Paso Robles area of San Luis Obispo County. ATE previously prepared a traffic study that assumed a 24-lot subdivision and that study was reviewed by the County and Caltrans. The application has been revised to include a 18-lot subdivision. The traffic study has been revised to assess the 18-lot subdivision as well as to address the comments provided by Caltrans and the County. The study revisions include:

- 1. Revised to address 18-lot subdivision.
- 2. Analysis of the SR 46E/Jardine Road intersection for the Friday P.M. peak hour period (in addition to the weekday A.M. and P.M. peak periods).
- 3. Revised intersection LOS modeling for the SR 46E/Jardine Road intersection to be consistent with the analysis prepared for the Golden Hill Retail Center.<sup>1</sup>
- 4. Revised cumulative analysis using the Year 2030 forecasts contained in the Golden Hill Retail Center traffic study.
- 5. Inclusion of mitigation contribution text for cumulative impacts.

Golden Hill Retail Center, Final Transportation Impact Analysis, Fehr & Peers, April 2007.

#### PROJECT DESCRIPTION

The project site is located adjacent to Estrella Road just east of Jardine Road in the Paso Robles area as shown in Figure 1. The land owners have submitted an application to the County for an Agricultural Cluster Subdivision to develop 18 single family homes. Figure 2 shows the project site plan. Access to the site is proposed via two roadways connecting to Estrella Road. The two roadways connect within the site, with a loop road serving the 18 single family units in the southwest area of the property (see Figure 2).

#### **EXISTING CONDITIONS**

#### Street Network

The project is served by State Route 46 East (SR 46E), Jardine Road, and Estrella Road (see Figure 1). The following text provides a brief discussion of the study-area roadways.

**SR 46E**, located south of the project site, is an east-west State highway. Within the Paso Robles area, SR 46E extends as a four-lane divided highway from U.S. Highway 101 to east of Airport Road. SR 46E narrows to two-lanes east of Airport Road and continues east past Jardine Road to the San Joaquin Valley.

**Jardine Road**, located west of the project site, is a north-south two-lane County road that extends from SR 46E to Estrella Road. The SR 46E/Jardine Road intersection is controlled by STOP signs (Jardine Road stopped).

**Estrella Road**, located north of the project site, is an east-west County road that extends east from Jardine Road to SR 46E and west from Jardine Road to River Road near San Miguel. The project site fronts the south side of Estrella Road just east of Jardine Road.

# Intersection Operations

Traffic flow on roadway networks is most constrained at intersections, therefore a detailed traffic flow analysis examines the operating conditions of critical intersections during peak travel periods. "Level of Service" (LOS) A through F are used to rate intersection operations, with LOS A indicating free flow operations and LOS F indicating congested operations (more complete definitions of levels of service are attached). San Luis Obispo County and Caltrans consider LOS C as the minimum operating standard for the Paso Robles area.

The SR 46E/Jardine Road intersection is the key intersection identified for assessing potential impacts generated by the Estrella River Vineyard Agricultural Cluster Subdivision. The existing lane geometry for the intersection is shown on Figure 3. The existing weekday A.M. and P.M. peak hour traffic volumes and Friday P.M. peak hour traffic volumes are shown on Figure 4. The traffic volumes were obtained from the traffic study prepared for the Golden Hill Retail

Center traffic study. Levels of service were calculated for the intersection using the methodology outlined in the Highway Capacity Manual (HCM)<sup>2</sup>. The SR 46E/Jardine Road intersection is *unsignalized* (stop sign controlled on the Jardine Road approach). The County and Caltrans LOS C standard applies to each of the constrained movements at the intersection.

Table 1 lists the existing levels of service for the intersection (level of service calculation worksheets are attached). As shown, the levels of service for the southbound left- and right-turn movements from Jardine Road intersection currently exceed the LOS C standard.

Table 1 SR 46E/Jardine Road Existing Levels of Service

AND THE RESIDENCE OF THE PROPERTY OF THE PROPE	COLD PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE P	Delay / LOSª							
Movement	Weekday A.M. Peak	Weekday P.M. Peak	Friday Peak						
EB Left	8.9 Sec/LOS A	10.6 Sec/LOS B	13.5 Sec/LOS B						
WB Left	8.2 Sec/LOS A	8.9 Sec/LOS A	9.8 Sec/LOS A						
SB Left	33.1 Sec/LOS D	> 50 Sec/LOS F	> 50 Sec/LOS F						
SB Right	18.8 Sec/LOS C	18.8 Sec/LOS C	36.7 Sec/LOS E						

<sup>&</sup>lt;sup>a</sup> LOS based on average number of seconds of delay per vehicle.

#### THRESHOLDS OF SIGNIFICANCE

# San Luis Obispo County

The County has adopted LOS C as the minimum standard for intersection operations in rural areas of the County, with mitigation required for LOS D, LOS E and LOS F operations.

<sup>&</sup>lt;sup>2</sup> <u>Highway Capacity Manual</u>, Transportation Research Board, National Research Council, 2000.

## Caltrans Traffic Study Guidelines

According to Caltrans' Guide for the Preparation of Traffic Impact Studies, Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D for State facilities<sup>3</sup>. The transition between LOS C and LOS D equates to LOS C. Thus, Caltrans endeavors to maintain a target of LOS C for State facilities.

# PROJECT-GENERATED TRAFFIC VOLUMES

## **Trip Generation**

Trip generation estimates were calculated for the project based on the Single Family Detached Housing (Land-Use Code #210) rates presented in the Institute of Transportation Engineers (ITE) Trip Generation Manual.<sup>4</sup> Table 2 summarizes the trip generation estimates for the proposed project. The project is assumed to generate the same number of trips during the Friday P.M. peak hour as the typical weekday P.M. peak hour.

Table 2 Project Trip Generation

A DESCRIPTION OF THE PROPERTY							
		AI	TC	A.M. Peak Hou		P.M. Peak Hou	
Land Use	Size	Rate	Trips		Trips	Rate	Trips
Single Family Detached Housing	18 Units	9.57	172	0.75_	14	1,01	18_
Single Family Detached Housing	18 Units	9.57	172	0.75	14	1,01	18

The data presented in Table 2 show that the project would generate 172 average daily trips, with 14 trips occurring during the weekday A.M. peak hour period and 18 trips occurring during the weekday and Friday P.M. peak hour periods.

# Trip Distribution

Project-generated traffic was distributed and assigned to the study-area roadway network based on the percentages shown in Table 3 and presented on Figure 6. The trip distribution percentages were developed based on the existing traffic pattern at the SR 46E/Jardine Road intersection and consideration of the population, employment, and commercial centers in the Paso Robles area.

<sup>&</sup>lt;sup>3</sup> <u>Caltrans Guide for the Preparation of Traffic Impact Studies</u>, Caltrans, December 2002.

<sup>&</sup>lt;sup>4</sup> <u>Trip Generation</u>, Institute of Transportation Engineers, 8th edition, 2008.

Table 3
Project Trip Distribution

Origin/Destination	Direction	Percentage
SR 46E east of Jardine Road	East	10%
SR 46E west of Jardine Road	West	90%
Total	MATERIAL PROPERTY OF THE PROPE	100%

# PROJECT-SPECIFIC ANALYSIS

Levels of service were calculated for the SR 46E/Jardine Road intersection with the Existing

- + Project traffic volumes presented on Figure 7. Table 4 compares the Existing and Existing
- + Project levels of service and identifies project-specific impacts.

Table 4
SR 46E/Jardine Road
Existing & Existing + Project Levels of Service

	Delay / LOS <sup>a</sup>							
Peak Hour/Movement	Existing	Existing + Project	Impact?					
Weekday A.M. Peak								
EB Left	8.9 Sec/LOS A	9.0 Sec/LOS A						
WB Left	8.2 Sec/LOS A	8.2 Sec/LOS A	YES					
SB Left	33.1 Sec/LOS D	34.0 Sec/LOS D						
SB Right	18.8 Sec/LOS C	19.4 Sec/LOS C	W to see the second sec					
Weekday P.M. Peak								
EB Left	10.6 Sec/LOS B	10.7 Sec/LOS B						
WB Left	8.9 Sec/LOS A	8.9 Sec/LOS A	YES					
SB Left	> 50 Sec/LOS F	> 50 Sec/LOS F						
SB Right	18.8 Sec/LOS C	19.1 Sec/LOS C						
Friday P.M. Peak								
EB Left	13.5 Sec/LOS B	13.7 Sec/LOS B						
WB Left	9.8 Sec/LOS A	9.8 Sec/LOS A	YES					
SB Left	> 50 Sec/LOS F	>50 Sec/LOS F	Paramanani di Lila					
SB Right	36.7 Sec/LOS E	38.8 Sec/LOS E						

a LOS based on average number of seconds of delay per vehicle.

The data presented in Table 4 show that several of the movements at the SR 46E/Jardine Road intersection are forecast to operate at LOS D, E or F during the peak hour periods. The project would add 14 trips to the intersection during the weekday A.M. peak hour period and 18 trips to the intersection during the weekday and Friday P.M. peak hour periods, a potentially significant impact.

### Mitigation

SR 46E currently extends as a four-lane divided highway from U.S. Highway 101 to east of Airport Road and continues as a two-lane highway east of that point. Caltrans has initiated a project to widen the two-lane section to a four-lane divided highway between Airport Road and the SR 46E/SR 41 junction. Construction on the first phase of the widening project, from Airport Road to Geneseo Road, is scheduled to be completed in 2010. This phase includes improvements to the intersections along the reach, including the SR 46E/Jardine Road intersection. Figure 5 shows the improvements that have been designed for the SR 46E/Jardine Road intersection, which are summarized below.

<u>Eastbound Approach</u>: One left-turn lane, one thru lane, one thru + right-turn lane. <u>Westbound Approach</u>: One left-turn lane, two thru lanes, one right-turn lane.

Northbound Approach: One left + thru + right-turn lane.

Southbound Approach: One left + thru lane, one right-turn lane (with acceleration lane).

The intersection will remain STOP-sign controlled on the minor approach legs (Jardine Road). The eastbound and westbound left-turn lanes will continue through the intersection as acceleration lanes for the left-turns from the northbound and southbound approaches. These acceleration lanes will allow for a two-stage gap acceptance for left-turning vehicles from the minor approaches. This design feature will allow vehicles to cross one major approach leg and use the acceleration lanes in the median area for merging into the through traffic flows. An acceleration lane is also provided on westbound SR 46E to facilitate the southbound right-turn from Jardine Road onto SR 46E.

Existing + Project levels of service were calculated for the SR 46E/Jardine Road intersection assuming the planned improvements. Table 5 compares the Existing + Project levels of service with and without the improvements. The side street movements will operate with lower vehicular delays with the proposed improvements when compared to Existing conditions, thereby mitigating the project's impact.

Table 5
SR 46E/Jardine Road
Existing + Project Mitigated Levels of Service

A STATE OF THE STA	Delay / LOSª						
Peak Hour/Movement	Existing Geometry	With Mitigation					
Weekday A.M. Peak	AND EXCEPTION OF THE PROPERTY	Total Control					
EB Left	9.0 Sec/LOS A	8.8 Sec/LOS A					
WB Left	8.2 Sec/LOS A	8.1 Sec/LOS A					
SB Left	34.0 Sec/LOS D	12.6 Sec/LOS B					
SB Right	19.4 Sec/LOS C	13.2 Sec/LOS B					
Weekday P.M. Peak							
FB Left	10.7 Sec/LOS B	10.6 Sec/LOS B					
WB Left	8.9 Sec/LOS A	9.0 Sec/LOS A					
SB Left	> 50 Sec/LOS F	20.3 Sec/LOS C					
SB Right	19.1 Sec/LOS C	12.8 Sec/LOS B					
Friday P.M. Peak							
EB Left	13.7 Sec/LOS B	13.5 Sec/LOS B					
WB Left	9.8 Sec/LOS A	9.9 Sec/LOS A					
SB Left	>50 Sec/LOS F	26.7 Sec/LOS D					
SB Right	38.8 Sec/LOS E	16.1 Sec/LOS C					

<sup>&</sup>lt;sup>a</sup> LOS based on average number of seconds of delay per vehicle.

#### **CUMULATIVE ANALYSIS**

#### **Cumulative Traffic Volumes**

Pursuant to the direction of County staff, Cumulative traffic volume forecasts were taken from the Year 2030 forecasts contained in the Golden Hill Retail Center traffic study. Figures 8 and 9 show the Cumulative and the Cumulative + Project peak hour traffic forecasts.

## Intersection Operations

Levels of service were calculated for the SR 46E/Jardine Road intersection assuming the Cumulative and the Cumulative + Project peak hour traffic forecasts. The level of service analysis assumes completion of the planned improvements at the intersection (widening SR 46E to four lanes and adding lanes at the SR 46E/Jardine Road intersection). Table 6 compares the Cumulative and Cumulative + Project levels of service.

Table 6
SR 46E/Jardine Road
Cumulative & Cumulative + Project Levels of Service

	Delay / LOS <sup>a</sup>						
Peak Hour/Movement	Cumulative	Cumulative + Project	Impact?				
Weekday A.M. Peak	A LANGUE LEVY THE PROPERTY OF	CONTRACTOR OF THE CONTRACTOR O					
EB Left	20.9 Sec/LOS C	21.1 Sec/LOS C					
WB Left	10.6 Sec/LOS B	10.6 Sec/LOS B	YES				
SB Left	>50 Sec/LOS F	>50 Sec/LOS F					
SB Right	>50 Sec/LOS F	> 50 Sec/LOS F	77				
Weekday P.M. Peak							
EB Left	> 50 Sec/LOS F	> 50 Sec/LOS F					
WB Left	15.8 Sec/LOS C	15.8 Sec/LOS C	YES				
SB Left	>50 Sec/LOS F	> 50 Sec/LOS F					
SB Right	>50 Sec/LOS F	> 50 Sec/LOS F	which the second				
Friday P.M. Peak							
EB Left	>50 Sec/LOS F	> 50 Sec/LOS F					
WB Left	21.7 Sec/LOS C	21.7 Sec/LOS C	YES				
SB Left	>50 Sec/LOS F	> 50 Sec/LOS F					
SB Right	>50 Sec/LOS F	> 50 Sec/LOS F					

<sup>\*</sup> LOS based on average number of seconds of delay per vehicle.

The analysis shows that the SR 46E/Jardine Road intersection is forecast to operate at LOS F under Cumulative conditions without the Estrella River Vineyard Agricultural Cluster Subdivision Project. The project would contribute to the cumulative impact by adding 14 trips to the intersection during the weekday A.M. peak period and 18 trips to the intersection during the weekday and Friday P.M. peak hour periods.

# Mitigation

Payment of applicable City/County fees would mitigate the project's cumulative impact to the intersection. Caltrans is in the process of developing a corridor plan for SR 46, with publication and adoption scheduled for the first half of 2009. The plan will identify future improvements for the corridor from U.S. Highway 101 to the San Luis Obispo/Kern county line. The intent is to have the plan integrated into the Regional Transportation Plan, as well as the County's Infrastructure Plan and the City of Paso Robles Circulation Element Plan. Funding for the future improvements would come from Federal, State, and local levels. The local funds would be collected via AB 1600 fee programs or other funding mechanism(s) established by the City of Paso Robles and County of San Luis Obispo. The Estrella River

Vineyard Agricultural Cluster Subdivision Project would be subject to the fee programs that are in place at the time of occupancy.

This concludes our traffic impact analysis for the Estrella River Vineyard Agricultural Cluster Subdivision (Tract 2905). We appreciate the opportunity to assist you with the project.

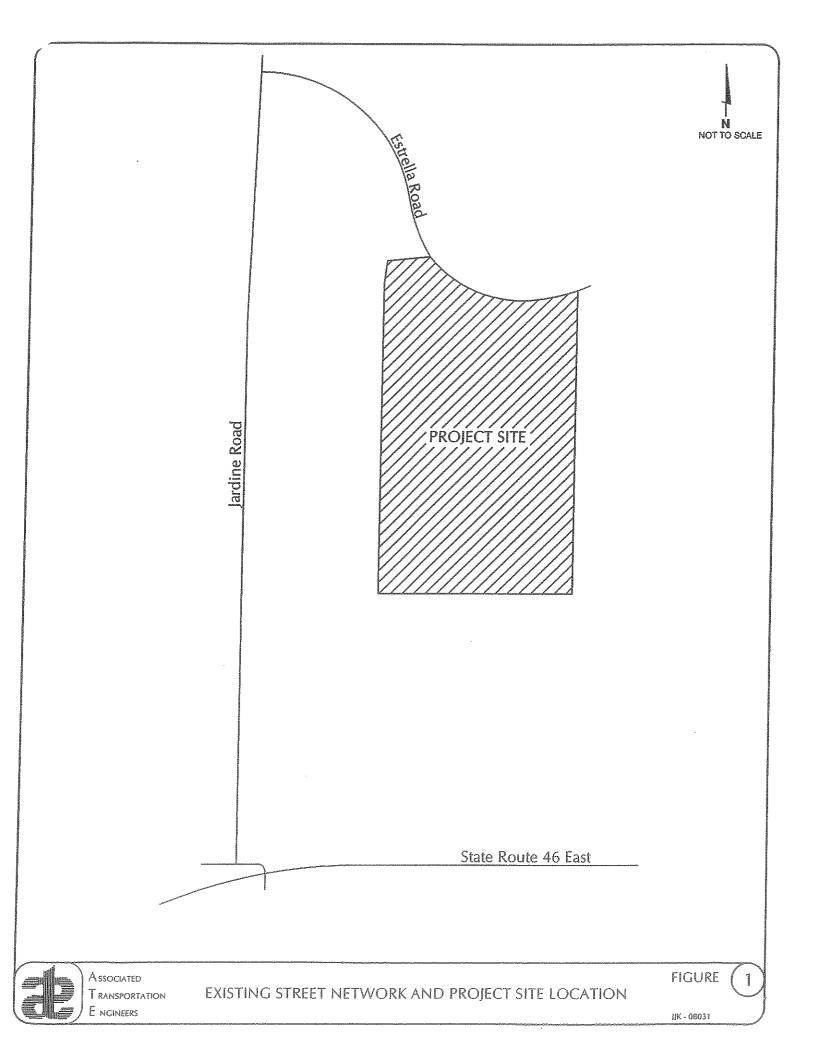
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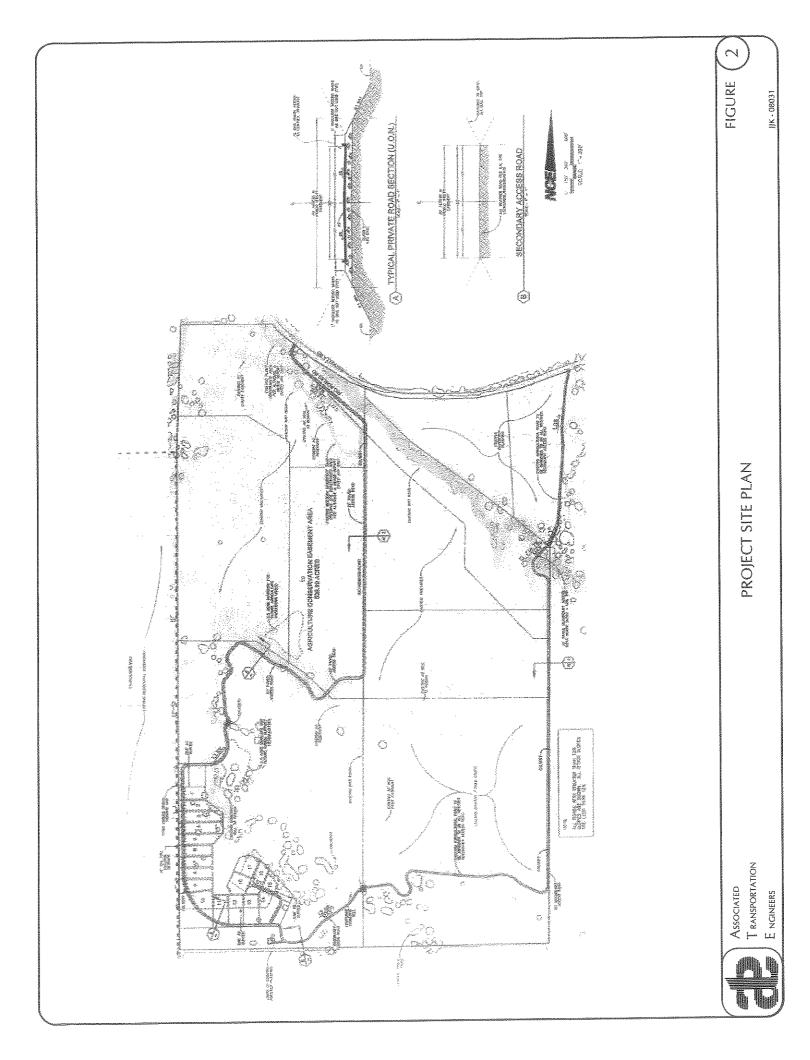
Scott A. Schell, AICP, PTP

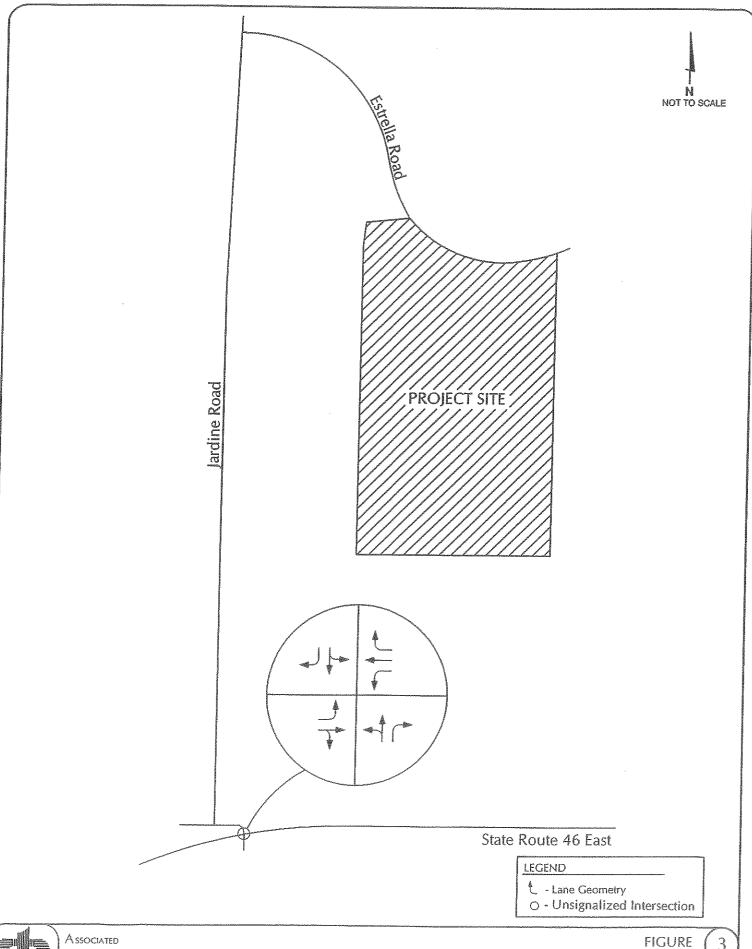
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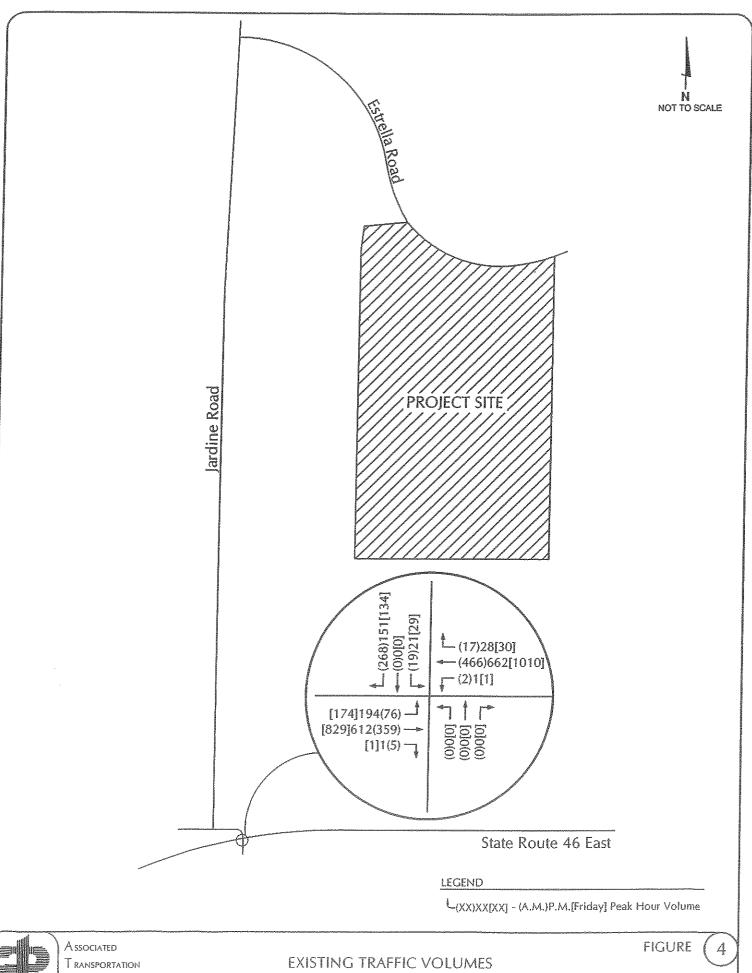




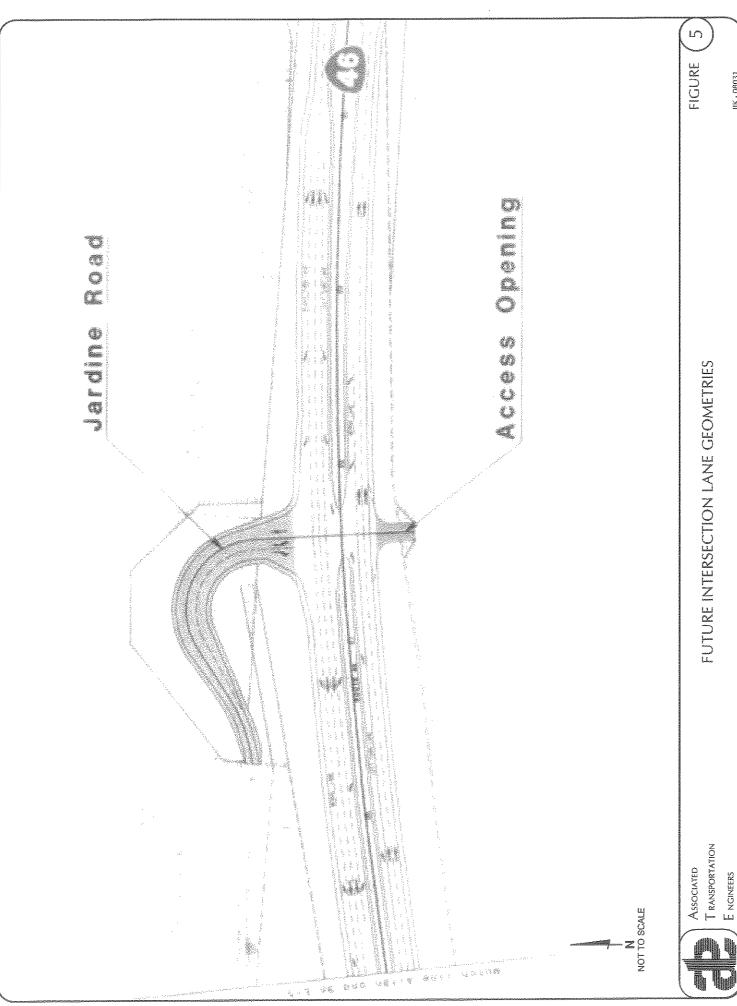




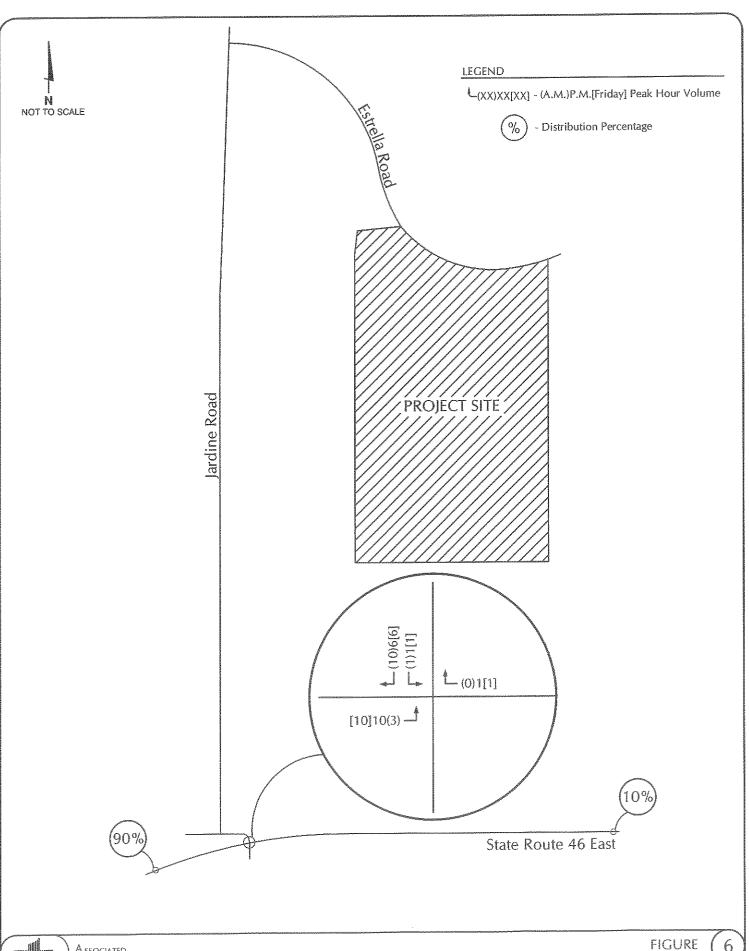
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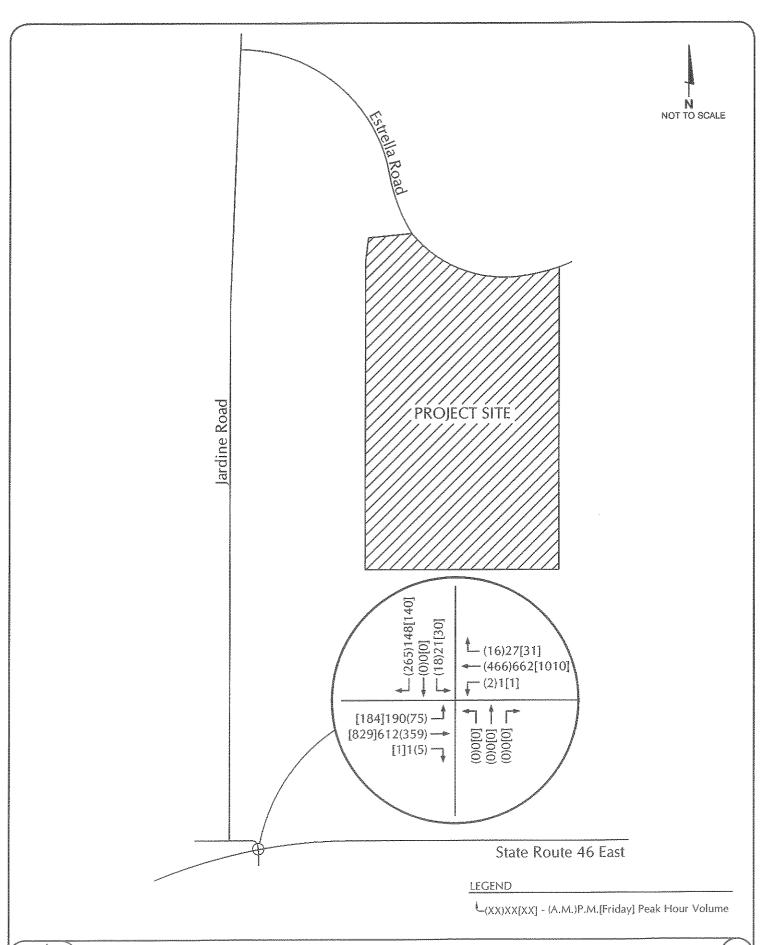


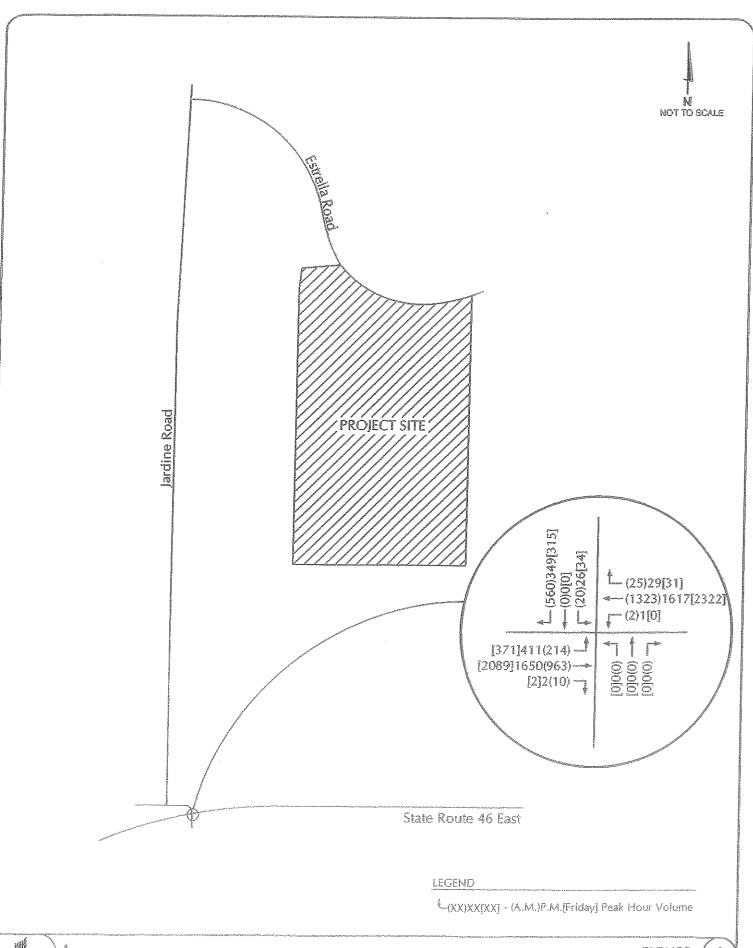
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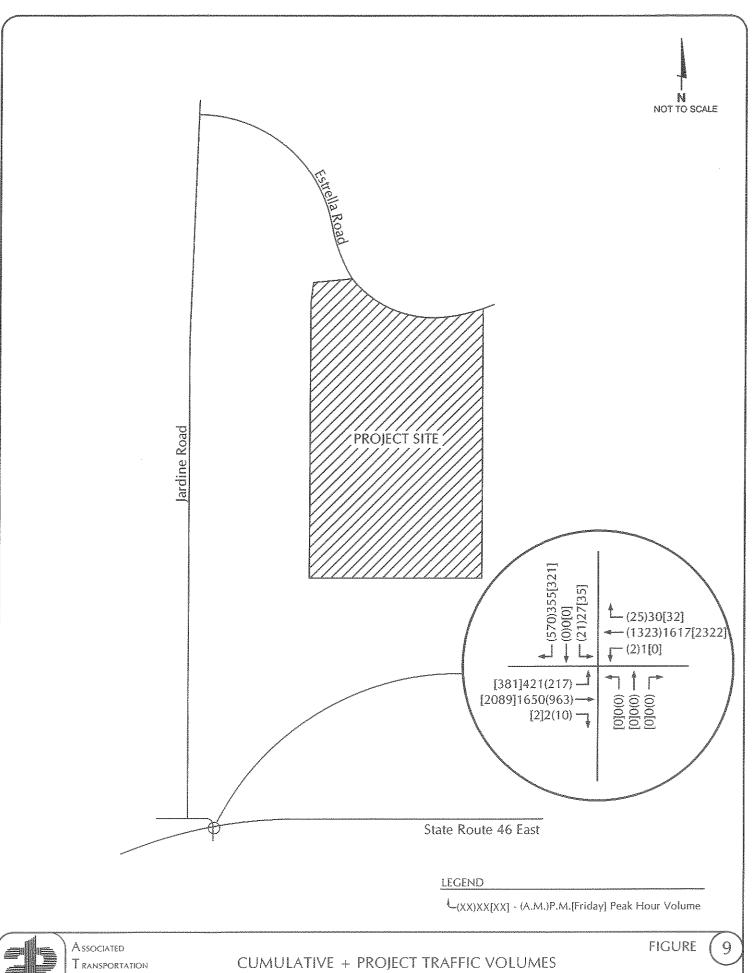






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CUMULATIVE TRAFFIC VOLUMES FIGURE



#### Signalized Intersection Level of Service Definitions

LOS	Delay	V/C Ratio	Definition
Α	< 10.0	< 0.60	Progression is extremely favorable. Most vehicles arrive during the green phase. Many vehicles do not stop at all.
В	10.1 - 20.0	0.61 - 0.70	Good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20.1 - 35.0	0.71 - 0.80	Only fair progression, longer cycle lengths, or both, result in higher cycle lengths. Cycle lengths may fail to serve queued vehicles, and overflow occurs. Number of vehicles stopped is significant, though many still pass through intersection without stopping.
D	35.1 - 55.0	0.81 - 0.90	Congestion becomes more noticeable. Unfavorable progression, long cycle lengths and high v/c ratios result in longer delays. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
Ĺ	55.1 - 80.0	0.91 - 1.00	High delay values indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent
T T T T T T T T T T T T T T T T T T T	> 80.08	> 1.00	Considered unacceptable for most drivers, this level occurs when arrival flow rates exceed the capacity of lane groups, resulting in many individual cycle failures. Poor progression and long cycle lengths may also contribute to high delay levels.

<sup>&</sup>lt;sup>a</sup> Average control delay per vehicle in seconds.

### Unsignalized Intersection Level of Service Definitions

The HCM¹ uses control delay to determine the level of service at unsignalized intersections. Control delay is the difference between the travel time actually experienced at the control device and the travel time that would occur in the absence of the traffic control device. Control delay includes deceleration from free flow speed, queue move-up time, stopped delay and acceleration back to free flow speed.

LOS	Control Delay Seconds per Vehicle
Α	< 10.0
В	10.1 - 15.0
С	15.1 - 25.0
D	25.1 - 35.0
F	35.1 - 50.0
j	> 50.0

<sup>&</sup>lt;sup>1</sup> Highway Capacity Manual, National Research Board, 2000

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95% queue length	0.31	0.01		0.	00	0.79		3.42
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Approach Delay (s/veh)	· · · · · · · · · · · · · · · · · · ·						C	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Approach LOS		46 UP		S+ <sup>TM</sup> Version 5.2	Partie and Associated Association		rated: 5/26/2	2009 2:1

	TW	O-WAY STOP	CONTROL	SUM	VARY			1911	
General Information			Site Info	ormatic	on .				
Analyst	DLD		Intersecti	Intersection			STATE ROUTE 46 E/JARDINE ROAD		
Agency/Co.	ATE	ATE				SAN LUIS OBISPO COUNTY			
Date Performed	5/26/09					EX+PROJ	IECT WIT	H	
Analysis Time Period	AM PEAK	( HOUR	Analysis '	Year		IMPROVE	MENTS		
		VINEYARD PROJ	ECT #08031						
East/West Street: STA7		<u>AST</u>			t: JARDIN	IE ROAD			
ntersection Orientation:	East-West		Study Per	rioa (nrs)	): 7.00				
Vehicle Volumes ar	id Adjustmei								
Major Street		<u>Eastbound</u>			A	Westbour	<u>10</u>	6	
<u> Movement</u>	1	2 T	] 3   R		4	5 T		R	
follows for the Bal	<u>L</u>	359	<u> </u>		2	466		17	
/olume (veh/h) Peak-Hour Factor, PHF	0.92	0.92	0.92		0.92	0.92		0.92	
lourly Flow Rate, HFR	85	390	5		2	506		18	
veh/h) Percent Heavy Vehicles	4	militario (Alla Participa Company)			4				
Median Type			Two Wa	y Left Tu	ırn Lane				
RT Channelized			0	0				1	
.anes	1	2	0		1	2		1	
Configuration	L	7	TR		L	Ī		R	
Jpstream Signal		0				0			
Minor Street		Northbound				Southbou	nd		
<b>N</b> ovement	7	8	9		10	11		12	
	L	T	R		L	T		R	
/olume (veh/h)	0	0	0		20	0		278	
Peak-Hour Factor, PHF	0.92	0.92	0.92		0.92	0.92		0.92	
Hourly Flow Rate, HFR veh/h)	0	0	0		21	0		302	
Percent Heavy Vehicles	4	4	4		4	4		4	
Percent Grade (%)		0				0			
Flared Approach		N				N			
Storage		0				0			
RT Channelized	100000		0					0	
anes	0	1	1		0	1		1	
Configuration	<u>LT</u>		R		LT		ATTICAL NAME OF THE PARTY.	R	
Delay, Queue Length, a						1 0			
Approach	Eastbound	Westbound		<u>irthbound</u>			outhbour	·····	
Vlovement	4	4	7	88	9	10	11	12	
ane Configuration	L	L	LT		R	L.T		R	
/ (veh/h)	85	2	0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	21	***************************************	302	
C (m) (veh/h)	1041	1146			804	495		740	
//c	0.08	0.00			0.00	0.04	***************************************	0.41	
95% queue length	0.27	0.01			0.00	0.13		2.05	
Control Delay (s/veh)	8.8	8.1	***************************************		9.5	12.6		13.2	
LOS	A	A			A	В		В	
Approach Delay (s/veh)	600	45 vis			<u></u>		13.2		
Approach LOS	07.85	ué-lik	management (A)				В		
	oride All Rights Resi			TM Versi		Gene	erated: 5/26	/2009 2:16	

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	TW	D-WAY STOP	CONTR	OL SI	JMMARY			
General Information	1		Site I	nforn	nation			
Analyst Agency/Co. Date Performed Analysis Time Period	DLD ATE 10/16/08	ATE		Intersection  Jurisdiction  Analysis Year		STATE ROUTE 46 E/JARDINE ROAD SAN LUIS OBISPO COUNTY CUMULATIVE (2030)		)
•							Marie Control	NAMANA SERVICE
		VINEYARD PRO	DJECT #08	031		W.C. DO & D		
East/West Street: STAT	WF7777477	:AST		- ANNUAL PROPERTY.	Street: JARD	INE ROAD	AND	NEW CONTRACTOR OF THE PERSON NAMED IN CO
Intersection Orientation:			Study	renou	(hrs): 1.00	And the second s		- Mary 1990
<u>Vehicle Volumes ar</u>	id Adjustme			T		Westbou	nd	
Major Street	1	Eastbound 2	3		4	<u> </u>	1110	6
Movement	L.	T T	R		L	T		R
Volume (veh/h)	214	963	10		0	1323		25
Peak-Hour Factor, PHF	0.92	0.92	0.92	)	0.92	0.92		0.92
Hourly Flow Rate, HFR (veh/h)	232	1046	10		0	1438		27
Percent Heavy Vehicles	4				4			es
Median Type				Two Way Left Turn Lane				
RT Channelized		and the second s	0		The state of the s			1
Lanes	1 1	2	0		1	2		1
Configuration	L	T	TR		L			R
Upstream Signal		0						
Minor Street		<u>Northbound</u>			AA	Southbound 11		12
Movement	7	<u>8</u> T	9 R		10 L	T		R
S	<u> </u>	0	0		20	0		560
Volume (veh/h) Peak-Hour Factor, PHF	0.92	0.92	0.92	>	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	0.02	0	0.02		21	0	Anna Anna Canada Ca	608
Percent Heavy Vehicles	4	4	4		4	4		4
Percent Grade (%)		0			20)	0		
Flared Approach		N				N		
Storage		0			Sel V Greeney	0		
RT Channelized			0		in the second			0
Lanes	0	1	1		0	1		1
Configuration	LT		R		LT			R
Delay, Queue Length, a	nd Level of Se	ervice						
Approach	Eastbound	Westbound		Northb	ound		Southbou	nd
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT	***************************************	R	LT	-	R
v (veh/h)	232	0	0	-	0	21		608
C (m) (veh/h)	458	643			490			366
v/c	0.51	0.00	No. of the last of	1	0.00			1.66
95% queue length	3.00	0.00		İ	0.00			128.12
Control Delay (s/veh)	20.9	10.6			12.3		The state of the s	1229
LOS	C	B			B			F
Approach Delay (s/veh)		General Control Contro	1	<u> </u>		2000///	7/1 <sup>2</sup> 20	
Approach LOS							******	

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	TW	O-WAY STOP	CONTRO	L SL	IMMARY		DACTO ENGLISHED			
General Information	le a se a se a se		Site In	form	ation			4 10 19 9 9 15 16		
Analyst Agency/Co. Date Performed	DLD ATE 5/26/09		Intersec	tion		COUNTY	IE ROAD 3 OBISPO	0) ÷		
Analysis Time Period	AM PEAR		Analysis Year PROJECT  OJECT #08031							
Project Description ES East/West Street: STAT	<u>IELLA RIVEK</u> E POLITE 46 E	VINEYARD PROJ AST	North/Sc	<u>/</u> suth S	treet: JARDIN	IF ROAD		AND COMPANY OF THE PARK OF THE		
ntersection Orientation:		710//	Study P			ALCOHOL:		***************************************		
Vehicle Volumes an		nte	,,	THE REAL PROPERTY.						
verncie volumes an Najor Street	iu Aujustine	Eastbound		T	LILIUS PROCESSION CONTRACTOR CONT	Westbou	nd	II.		
Viajor Street Viovement	1	2	3		4	5		6		
AIOAGHGH		T	R			T		R		
Volume (veh/h)	217	963	10		0	1323		25		
Peak-Hour Factor, PHF	0.92	0.92	0.92		0.92	0.92		0.92		
Hourly Flow Rate, HFR	235	1046	10		0	1438	Westernament .	27		
Percent Heavy Vehicles	4				4			·		
Vledian Type		1	Two W	Two Way Left Turn Lane						
RT Channelized			0					1		
anes	1	2	0		1	2		1		
Configuration	L	T	TR		Luc	T		R		
Jpstream Signal		0				0		-14-116		
Winor Street		Northbound		-		Southbou	ind	The second secon		
Movement	<del>  7</del>	8	9		10	11	Ė.	12		
610 4 011 1011 16	L		R	- L		T		R		
Volume (veh/h)	0	0	0		21	0		570		
Peak-Hour Factor, PHF	0.92	0.92	0.92	4	0.92	0.92		0.92		
Hourly Flow Rate, HFR (veh/h)	0	0	0		22	0		619		
Percent Heavy Vehicles	4	4	4		4	4		4		
Percent Grade (%)	WELL STREET	0	www.ku.euc.sy//epo-e			0				
Flared Approach		N				Ν				
Storage		0			A CONTRACTOR OF THE PROPERTY O	0				
RT Channelized			1 0					0		
anes	1 0	1	1		0	1		1		
_anes Configuration	TLT		$\frac{1}{R}$		LT			R		
	1	2000				The same of the sa		DOCUMENTAL PROPERTY.		
Delay, Queue Length, a		rvice Westbound	ß.	orthbo	und	C	outhbound	1		
Approach	Eastbound			8	<u>жини</u> 9	10	11	12		
<u> Movement</u>	1	4	7	<u> </u>		<u>. [</u>	1 1	$\frac{1}{R}$		
Lane Configuration	L	L	L.T		R	LT_		<u> </u>		
v (veh/h)	235	0	0		0	22		619		
C (m) (veh/h)	458	643			490			366		
//c	0.51	0.00			0.00			1.69		
95% queue length	3.08	0.00			0.00			133.46		
Control Delay (s/veh)	21.1	10.6			12.3			1283		
LOS	C	В		····	B			F		
Approach Delay (s/veh)	40.00°	Acres.		measurement of the broken			£			

	TW	O-WAY STOF	CONTR	OL SU	<b>MMARY</b>			
General Information			Site li	nforma	tion		MINES CONTRACTOR	8 8 6 8
	- Control of the Cont	MAXIMUM GD-277-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-	Interse	ontion	200720070000000000000000000000000000000	STATE R		
Analyst	DLD		HIGISC	CUUII		E/JARDIN		
Agency/Co.	ATE		Jurisdi	ction		SAN LUIS		)
Date Performed	10/16/08	e 1 1 en 1 1 mm	Analys	ic Voor		COUNTY EXISTING		
Analysis Time Period	PM PEAR	KHOUR	Allalys	is Year		EXIGINAC	9	
		VINEYARD PRO						
East/West Street: STA7		EAST		THE RESERVE OF THE PERSON OF T	eet: JARDI	<u>VE ROAD</u>		WHO
ntersection Orientation:	AND THE RESERVE OF THE PROPERTY OF THE PROPERT		Study	<u> eriod (n</u>	rs): 1.00	AND AND ADDRESS OF THE PARTY OF		
Vehicle Volumes ar	<u>id Adjustme</u>							
Major Street		<u>Eastbound</u>	1		A	Westbou	nd	
<u> Movement</u>	1		3 R		4 L	5 T		6 R
Internal (contains	194	612	<u> </u>		<u></u>	662		28
Volume (veh/h) Peak-Hour Factor, PHF	0.92	0.92	0.92		0.92	0.92		0.92
Hourly Flow Rate, HFR (veh/h)	210	665	1		1	719		30
Percent Heavy Vehicles	4	= w	50		4			
Median Type	***************************************			Undivid	led	.E.		
RT Channelized	- Contraction of the Contraction		0		**************************************			0
anes	1	1	0		1	1		1
Configuration	L.		TR		L	T		R
Jpstream Signal		0			(magazina da	0		
Minor Street		Northbound				Southbou	nd	
Movement	7	8	9		10	11		12
A A A A A A A A A A A A A A A A A A A	L	T	R		L	Т		R
/olume (veh/h)	0	0	0		21	0		151
Peak-Hour Factor, PHF	0.92	0.92	0.92		0.92	0.92		0.92
Hourly Flow Rate, HFR veh/h)	0	0	0		22	0		164
Percent Heavy Vehicles	4	4	4		4	4	4	
Percent Grade (%)		0				0		
Flared Approach		N		· Comment		N		
Storage		0				0		
RT Channelized			0					0
anes	0	1	1		0	1		1
Configuration	LT		R		LT			R
Delay, Queue Length, a	nd Level of Se	rvice						
Approach	Eastbound	Westbound	1	Vorthbou	nd	S	outhboun	d
/lovement	1	4	7	8	9	10	11	12
ane Configuration	L	L	LT	***************************************	R	LT	,	R
/ (veh/h)	210	1	0		0	22		164
C (m) (veh/h)	851	914	· VIII		456	49		425
//c	0.25	. 0.00			0.00	0.45	***************************************	0.39
95% queue length	0.98	0.00			0.00	2.11		1.86
	10.6	8.9			12.9	135.1	200000000000000000000000000000000000000	18.8
Control Delay (s/veh)		***************************************			B B	F F	*****	+ 70.0 C
OS	E)	A				1	32.5	
Approach Delay (s/veh)	V2-503-	(04 985)			·			,
Approach LOS	area	ed eth		***************************************		J	LJ.	·

	T\s/	O-WAY STOP	CONTR	OI SI	I INAI	MARV	The state of the s	OWN DESCRIPTION OF THE PROPERTY OF THE PROPERT		
General Information	entre come	U-WAI DI UF	Site		NEW COLUMN					
<u>Acticial Illinitiliaria</u>							STATE R	OUTE 46		
Analyst	DLD		Interse	ection				VE ROAD		
Agency/Co.	ATE		Jurisd	intion			SAN LUI	S OBISPO		
Date Performed	5/26/09						COUNTY			
Analysis Time Period	PM PEAH	( HOUR	Analys	sis Yea	ľ		EXISTIN	G+PROJE	CT	
Project Description ES	STELLA RIVER	VINEYARD PRO	\ JECT #08	031				WW. W.		
East/West Street: STAT					Stree	t: JARDII	VE ROAD	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Intersection Orientation:	East-West		Study	Period	(hrs	): 1.00	WED NOT THE RESERVE OF THE RESERVE O			
Vehicle Volumes ar	nd Adjustme	nts								
Major Street		Eastbound					Westbou	ind		
Movement	1	2	3			4	5		6	
		T	<u>R</u>			<u> </u>	T		R	
Volume (veh/h)	204	612	1			1	662		29	
Peak-Hour Factor, PHF	0.92	0.92	0.92	-		0.92	0.92		0.92	
Hourly Flow Rate, HFR (veh/h)	221	665	1		<b></b>	1	719		31	
Percent Heavy Vehicles	4						4			
Median Type				Undi	ndivided					
RT Channelized			0		unaranasirihsirid	Wittenson Con-			0	
Lanes	1	1	0		1		1		1	
Configuration	L		TR		L		7		R	
Upstream Signal		0				«U++»	0			
Minor Street		Northbound				Southbound				
Movement	7	8	9			10	11		12	
	TITLE	T	R			L	Т		R	
Volume (veh/h)	0	0	0			22	0		157	
Peak-Hour Factor, PHF	0.92	0.92	0.92			0.92	0.92		0.92	
Hourly Flow Rate, HFR (veh/h)	0	0	0			23	0	00 00 00 00 00 00 00 00 00 00 00 00 00	170	
Percent Heavy Vehicles	4	4	4			4	4	1.00 miles	4	
Percent Grade (%)		0	Co. C.				0			
Flared Approach		N					N		V	
Storage		0	-				0	الخنادسين		
RT Channelized			0					1000	0	
Lanes	0	1	1		alminerata di Santa d	0	1		1	
Configuration	LT		R			LT			R	
Delay, Queue Length, a	nd Level of Se	rvice								
Approach	Eastbound	Westbound		Northbo	ound		S	outhbound		
Movement	1	4	7	8	THE STREET STREET	9	10	11	12	
Lane Configuration	L	L	LT	<u> </u>		R	LT		R	
v (veh/h)	221	1	0			0	23		170	
C (m) (veh/h)	850	914				456 46			425	
V/c	0.26	0.00			0.00 0.50			0.40		
95% queue length	1.05	0.00	,,,,,			0.00	2.47		1.97	
and the second s	10.7	8.9		<u> </u>	**************************************	12.9	155.7	2000000	19.1	
Control Delay (s/veh)							F		C C	
LOS	В	A	A STATE OF THE STA	<u></u>		<u> </u>		)		
Approach Delay (s/veh)										
Approach LOS		*** 400	june june june							

	TW	O-WAY STOP	CONTRO	DL SU	MMARY			
General Information			Site Ir	ıform	ation			
			Interse	ction			OUTE 46	
Analyst	DLD						NE ROAD S OBISPO	
Agency/Co.	ATE		Jurisdio	ction		COUNTY		
Date Performed	5/26/09						JECT WIT	Ή
Analysis Time Period	PM PEAK	(HOUR	Analys	is Year		IMPROVI		• •
Project Description ES	TELLA RIVER	VINEYARD PROJE	ECT #0803	31				
East/West Street: STA7		AST			treet: JARDI	<u>NE ROAD</u>		
ntersection Orientation:	East-West		Study F	eriod (	hrs): <i>1.00</i>	TOTAL PROPERTY OF THE PARTY OF		CATTERNATION OF THE PARTY OF TH
Vehicle Volumes ar	ıd Adjustme	nts						
<b>Major Street</b>		Eastbound	A STATE OF THE PERSON NAMED OF THE PERSON NAME			<u>Westbou</u>	<u>nd</u>	
<u> Vlovement</u>	1	2	3		4	5		6
	L	T	R		<u>L</u>	T		R
/olume (veh/h)	204	612	1		11	662		29
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92 0.92		0.92		0.92
Hourly Flow Rate, HFR veh/h)	221	665	1	and the same of th	1	719		31
Percent Heavy Vehicles	4		birmi .		4			MP 62
Vledian Type			T	Vay Lef	t Turn Lane			
RT Channelized	2444444		0					1
anes	1	2	0		1	2		1
Configuration	L	T	TR		L	T		R
Jpstream Signal		0				0		
Minor Street		Northbound	1604-Na	27530011100000000000000000000000000000000		Southbou	ınd	
Vovement	7	8	9		10	11		12
113 (113 (113 (113 (113 (113 (113 (113	L		R		L	T		R
/olume (veh/h)	0	0	0		22	0		157
Peak-Hour Factor, PHF	0.92	0.92	0.92		0.92	0.92	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.92
lourly Flow Rate, HFR veh/h)	0	0	0		23	0	0	
Percent Heavy Vehicles	4	4	4		4	4		Ą
Percent Grade (%)		0	f scorery.		**************************************	0		
Flared Approach		N				N		
Storage		0				0		ALASAN FILERACIA
RT Channelized			0		MMM to the second secon			0
anes	0	1	1		0	1		1
_arres Configuration	TIT IT	500000 F	Ŕ	<del></del>	LT			R
					Lor E		2000	
Delay, Queue Length, a		Westbound	8	Northbo	und .	T	Southboun	4
Approach	Eastbound		7	8	9	10	11	1 12
Vlovement	1	4					1	$\frac{12}{R}$
ane Configuration	L	L.	<u>LT</u>		R	LT_	<u> </u>	<u> </u>
/ (veh/h)	221	1	0	***************************************	0	23		170
C (m) (veh/h)	865	906			657	259		631
//c	0.26	0.00			0.00	0.09		0.27
95% queue length	1.03	0.00		***************************************	0.00	0.29		1.10
Control Delay (s/veh)	10.6	9.0			10.5	20.3	-	12.8
OS	B	A			B	C		B
					L L		13.7	
Approach Delay (s/veh)		wrate f						
Approach LOS	Person	no sai					В	

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Methodological Contraction Con		^ 18/8 V 0 T 0 T		~1 C111	ases a sav		100 PER SHI (44 PEN ) 1 N		
General Informatio		O-WAY STOP	COCONDON BERNEVALUES	nforma					
General Informatio	8.1				IGIVII	STATE F	ROUTE 46		
Analyst	DLD		Inters	ection			NE ROAD		
Agency/Co.	ATE		Jurisd	iction			S OBISPO		
Date Performed	10/16/08					COUNTY		.	
Analysis Time Period	PM PEAP	<i>(HOUR</i>	Analys	sis Year		CUMULA	NTIVE (203	0)	
Project Description E	STELLA RIVER	VINEYARD PRO				444240600000000000000000000000000000000			
East/West Street: STA		EAST	~		reet: JARDII	<u>VE ROAD</u>	Sootween Control		
Intersection Orientation:	East-West		Study	Period (h	irs): 1.00				
Vehicle Volumes a	nd Adjustme	A TOTAL CONTRACTOR OF THE PROPERTY OF THE PROP							
Major Street		Eastbound				Westbou	nd		
Movement	1	2	3		4	5		6	
		T	<u>  R</u>		L	T		<u>R</u>	
Volume (veh/h)	411	1650	2 0.92		0 0.92	1617 0.92		29 0.92	
Peak-Hour Factor, PHF Hourly Flow Rate, HFR	0.92	0.92		14.000 Mahasa					
(veh/h)	446	1793	2		0	1757		31	
Percent Heavy Vehicles	4	NO. 20.	60 MD		4		and the same of th		
Median Type	AND THE PROPERTY OF THE PROPER		Two V	Vay Left	Turn Lane				
RT Channelized			0					1	
Lanes	11	2	0		1	2		1	
Configuration	L	myra:	<u>TR</u>		L	T		R	
Upstream Signal		0				0			
Minor Street	WWW.	Northbound		The state of the s		Southbou	ınd		
Movement	7	8	9		10	11		12	
		T	R		2	T		R	
Volume (veh/h)	0	0	0		26	0		349	
Peak-Hour Factor, PHF	0.92	0.92	0.92		0.92	0.92		0.92	
Hourly Flow Rate, HFR (veh/h)	0	0	0		28	0		379	
Percent Heavy Vehicles	4	4	4		4	4		4	
Percent Grade (%)		0		***************************************		0			
Flared Approach		N				N	A. Control of the Con		
Storage		0		- Annual		0			
RT Channelized			0		and the second s			0	
Lanes	0	1	1		0	1		1	
Configuration	LT		R		LT			R	
Delay, Queue Length, a	and Level of Se	rvice							
Approach	Eastbound	Westbound		Northbou	ınd	S	outhbound		
Movement	1	4	7	8	9	10	11	12	
Lane Configuration	L	L	LT	ANAL STREET	R	LT		R	
v (veh/h)	446	0	0	-	0	28		379	
C (m) (veh/h)	344	332		water and the same	278			287	
v/c	1.30	0.00			0.00		484	1.32	
95% queue length	61.82	0.00			0.00		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	56.13	
Control Delay (s/veh)	591.6	15.8	ATT I THE RESERVE OF STREET STREET STREET, STREET STREET, STRE		17.9	And the second s	ann ann ann an Airm an	642.3	
LOS	F.							F	
Approach Delay (s/veh)	W F							<u> </u>	
Approach LOS		coreo				annon anno anno anno anno anno anno ann	W. W		

	TW	O-WAY STOP	CONTR	OL S	UMN	ЛARY			
General Informatio			Site	nforn	natio	n	News to the second		
Analyst Agency/Co.	DLD ATE		Interse Jurisd	ection			STATE R E/JARDII SAN LUIS COUNTY	NE ROAL S OBISP	)
AND THE PROPERTY OF THE PROPER	5/26/09 PM PEAK		Analys		ır		CUMULA +PROJE(		30)
Project Description ES East/West Street: STA	TE ROUTE 46 E.		North/S	South S		t: JARDIN	IE ROAD	112/00/00/0	
Intersection Orientation:	East-West	00-22711-2-2712-2-2-2-2-2-2-2-2-2-2-2-2-2-	Study I	Period	(hrs)	: 1.00	nomation and the same of the s	THE STATE OF THE S	NOOTO WATER THE TAXABLE PROPERTY OF THE PARTY OF THE PART
Vehicle Volumes ar	nd Adjustmei								
Major Street		Eastbound					Westbou	nd	~
Movement	4	2	3			4	5 T		6 R
S. California Constantin	L	1650	R 2			<u>L</u>	1617		30
Volume (veh/h) Peak-Hour Factor, PHF	<u>421</u> 0.92	0.92	5	0.92 0.92			0.92		0.92
Hourly Flow Rate, HFR (veh/h)	457	1793	2 0.92		**************************************	1757		32	
Percent Heavy Vehicles	4	200				4			mm
Median Type			Two Way Left Turn Lane						
RT Channelized			0	0			***************************************		1
Lanes	1	2	0	) 1		2		1	
Configuration	L	T	TR		L		7		R
Upstream Signal		0					0		000007
Minor Street		Northbound		CONTRACTOR OF THE PARTY OF THE	OCCUPATION OF THE REAL PROPERTY.	***************************************	Southbou	ınd	
Movement	vang .	8	9	,		10	11		12
	L	7	R			L	T	***************************************	R
Volume (veh/h)	0	0	0			27	0		355
Peak-Hour Factor, PHF	0.92	0.92	0.92			0.92	0.92		0.92
Hourly Flow Rate, HFR (veh/h)	0	0	0		******************************	29	0		385
Percent Heavy Vehicles	4	4	4	······································	**********	4	4		4
Percent Grade (%)	and the second s	0					0		
Flared Approach		Λ					<u> </u>		
Storage		0				waterwaterwaterwaterwaterwaterwaterwater	0		
RT Channelized		200000	0						0
Lanes	0	1	1			0	1		1
Configuration	LT		<u>R</u>			LT			R
Delay, Queue Length, a	· · · · · · · · · · · · · · · · · · ·								
Approach	Eastbound	Westbound		<u>Northb</u>		····		outhbou	
Movement	1	4	7	8		9	10	11	12
Lane Configuration	L	L	LT			R	LT		R
v (veh/h)	457	0	0			0	29		385
C (m) (veh/h)	344	332				278			287
v/c	1.33	0.00				0.00			1.34
95% queue length	66.77	0.00				0.00			58.82
Control Delay (s/veh)	646.4	15.8	~~~			17.9			678.0
LOS	F	C				С			F
Approach Delay (s/veh)	2 US 20-			<u>L</u>			1	***************************************	I
Approach LOS	us-tes								
LANINGOLLEND							1		

TELLA RIVER	PM PEAK HOUR	Site Ir Interse	<b>iformati</b> ction	on		OUTE 46			
ATE 10/16/08 FRIDAY I TELLA RIVER	PM PEAK HOUR		ction			OUTE 46			
ATE 10/16/08 FRIDAY I TELLA RIVER	PM PEAK HOUR		36,011	STATE ROUTE 46 E/JARDINE ROAD					
10/16/08 FRIDAY I TELLA RIVER	PM PEAK HOUR	Jurisdio							
FRIDAY I TELLA RIVER	PM PEAK HOUR	R	ction		SAN LUIS COUNTY		,		
TELLA RIVER	- M. L. TIII. 110017	Analys	is Year		EXISTING				
		[ 7 (101)	1001		Here I I was				
	VINEYARD PROJ			1.0 FT TO 5		ACCOUNT OF THE PARTY OF THE PAR			
E ROUTE 46 L	=ASI		OWOZINATIO CONT.	et: JARDII	VE RUAU	necession of the second			
East-West		jStudy r	eriod (hrs	). 1.00					
d Adjustme	MINING WOOD ON THE PROPERTY OF		- 1		186 6				
	Eastbound	<u></u>		A		<u>10</u>	6		
<del></del>							R		
		<u> </u>		<u> </u>			<u> 30</u>		
	accomment and a comment and a			0.92	0.92		0.92		
189	901	1	And a security of the second s	1	1097		32		
4				4	==		πœ		
	and museum seed.	4	Undivide	d	A PARTY OF THE PAR				
		0	A STATE OF THE STA				0		
1	1	0	- Additional of the second	1	1	1			
L	LA ALLIAN AND PROPERTY OF THE	TR		L	T		R		
	0				0		×		
	Northbound				Southbour	nd			
7	8	9		10	11		12		
	T	R		L	T		R		
0	0	0		29	0		134		
0.92	0.92	0.92		0.92	0.92		0.92		
0	0	0		31	0		145		
4	4	4	***************************************	4	4		4		
	0				, 0				
	N		***************************************		N				
	0	+25000000000000000000000000000000000000			0				
	The state of the s	0					0		
0	1	1		0	1		1		
<u>LT</u>		R		LT			R		
nd Level of Se		95 YSHED 328 129		******					
Eastbound	Westbound	N	lorthbound						
1	4	7	8	9	10	14	12		
L	4	LT		R	LT		R		
189	1	0		0	31		14:		
611	745	одишалал		333	18		25		
0.31	0.00	**************************************		0.00	1.72		0.5		
1.34	0.00	Opinion and the same of the sa		0.00	10.80		3.6		
		the special section of the section o	A STATE OF THE STA	15.8	1876	and and the Commission of the	36.		
					F		TE		
		J			J	360.7			
							^~		
	1 L 0 0.92 0 4  LT 189 611 0.31 1.34 13.5 8	L T 174 829 0.92 0.92 189 901 4  1 1 1 L 0 Northbound 7 8 L T 0 0 0 0 0.92 0.92 0 0 0 0 0 0 4 4 4 0 0 N Northbound 1 4 4 1 0 0 N N O  A A A A A A A A A A A A A A A A A A	1         2         3           L         T         R           174         829         f           0.92         0.92         0.92           189         901         f           4             0         1         f         0           1         1         0         0           1         1         0         0           1         1         0         0           Northbound         7         8         9           L         T         R         0           0         0         0         0           0.92         0.92         0.92         0.92           0         0         0         0           0         1         1         1           LT         R         R         0           0         1         1         1           LT         R         0         0           0         1         1         1           LT         R         0         0           0         1         1         1           LT </td <td>1         2         3         1         R         174         829         1         0.92         &lt;</td> <td>1         2         3         4           L         T         R         L           174         829         7         7           0.92         0.92         0.92           189         901         1         1           4           4           Undivided           0         1         1         0         1           L         TR         L         0         1         1           L         TR         L         0         0         1</td> <td>  1</td> <td>  1</td>	1         2         3         1         R         174         829         1         0.92         <	1         2         3         4           L         T         R         L           174         829         7         7           0.92         0.92         0.92           189         901         1         1           4           4           Undivided           0         1         1         0         1           L         TR         L         0         1         1           L         TR         L         0         0         1	1	1		

	TAI	D-WAY STOP	CONTR	OL SI	JMF	MARY	<u> </u>	<del>Vertify and the second of the</del>			
General Information	0.00.00.00.00.00.00.00.00.00.00.00.00.0		Site	NAMES OF STREET							
		A A A Second and a second a second and a second a second and a second	Interse			A CONTRACTOR OF THE CONTRACTOR	STATE R	OUTE 46			
Analyst	DLD		Interse	ection				VE ROAD			
Agency/Co.	ATE		Jurisd	iction			=	S OBISPO			
Date Performed	10/16/08						COUNTY	G+PROJE	^7		
Analysis Time Period	FRIDAY I	PM PEAK HOUR	Anaiys	sis Yea	ſ		EXISTING	3*PROJE			
Project Description ES											
East/West Street: STAT		EAST	HARLES OF STREET			t: JARDIN	<u>IE ROAD</u>				
Intersection Orientation:	East-West		Study Period (hrs): 1.00								
Vehicle Volumes ar	nd Adjustme	W									
Major Street		Eastbound					Westbou	<u>nd</u>			
Movement	1	2	3			4	<u>5</u> T		6		
	L	7	R			<u>L</u>	1010		<u>R</u> 31		
Volume (veh/h)	184	829	0.92	,		7 0.92	0.92		31 0.92		
Peak-Hour Factor, PHF Hourly Flow Rate, HFR	0.92	0.92		1000							
(veh/h)	199	901	1	Keensynweess		1	1097	4	33		
Percent Heavy Vehicles	4					4			en av		
Median Type			T	Undiv	<i>Individed</i>						
RT Channelized			0						0		
Lanes	1	1	0	1		1		1			
Configuration	L		<u>TR</u>	TR L		L.	T		R		
Upstream Signal		0	<u></u>				0				
Minor Street		Northbound		Water No.	Southbo			ınd			
Movement	7	8	9		·/	10	11		12		
	L	The state of the s	R			L.	Ţ		R		
Volume (veh/h)	0	0	0			30	0		140		
Peak-Hour Factor, PHF	0.92	0.92	0.92	·	***************************************	0.92	0.92		0.92		
Hourly Flow Rate, HFR (veh/h)	0	0	0	HALIONBALLIONASA		32	0		152		
Percent Heavy Vehicles	4	4	4			4	Ą		4		
Percent Grade (%)		0		ĺ			0				
Flared Approach		N					N				
Storage		0					0				
RT Channelized			0						0		
Lanes	0	1	1			0	1		1		
Configuration	LT		R		HALAININ AND PORT	LT			R		
Delay, Queue Length, a	nd Level of Se	rvice						5.5.312.51			
Approach	Eastbound	Westbound	Į.	Northbo	ound		S	outhbounc			
Movement	1	4	7	8		9	10	11	12		
Lane Configuration	L	L	LT	Characterist		R	LT		R		
v (veh/h)	199	1	0			0	32		152		
C (m) (veh/h)	611	745		- Carlotte Control		333	17		257		
v/c	0.33	0.00	***************************************		***************************************	0.00	1.88		0.59		
95% queue length	1.44	0.00		-		0.00	11.63		4.03		
Control Delay (s/veh)	13.7	9.8				15.8	2172		38.8		
LOS	B		and a service and a security of service and a service and	diam's			F		E		
		<u> </u>		<u> </u>		*w*		409.7	least		
Approach Delay (s/veh)	No see	wa w						409.7 F			
Approach LOS								<u> </u>			

TW	O-WAY STOP	CONTR	OL S	UMN	MARY					
1		Site li	nforn	natio	on .					
DLD ATE 5/26/09	DAM DEAV UOUD	Jurisdi	ction	r		E/JARDI SAN LUI COUNTY EX+PRC	NE ROAL S OBISP V VECT WI	) ) TH		
		IMPROVEMENTS								
			A CONTRACTOR OF THE PARTY OF TH	^\4	4. (8/2/2/	UE 0040		assumente mountaine en e		
	:ASI		MATERIAL PROPERTY AND ADDRESS OF THE PARTY AND	CHORDOLOGICO CONTROLOGICO	HUNDHING CONCORDED CONCORD	VE KUAD		MANAGEMENT CONTROL OF THE PROPERTY OF THE PROP		
and the second s			CIIOG	(1113)	. 7.00					
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L	T	R	~			Ť		R		
184	829	1			1	1010		31		
0.92	0.92	0.92	0.92 0.92		0.92	0.92		0.92		
199	901	1 1		1097		33				
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		3								
	ALLALOOSIUS OLI ALOOSIUS OLI	frances-e						1		
	and the second s	<u> </u>						1		
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		<u> </u>						12 R		
		ļ						140		
		<u> </u>						0.92		
0	0	0.02			32 0			152		
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100	0	Зэличного о о о о о о о о о о о о о о о о о о		****		0	THE PARTY CONTRACTOR OF THE PA			
	N		min(c) combutant castoner	CONTROL VALUE OF	Distriction Level and American American American	N	***************************************	DEN NO-MORA SEMENIA SEMENIA HEMO		
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***************************************		0		acreamine Azimira	**************************************			0		
0	7	1			0	1		1		
LT	***************************************	R			L T			R		
nd Level of Se	rvice				Maria da T					
Eastbound	Westbound	<u> </u>	Vorthbo	ound	***************************************	5	outhbour	ıd		
1	4	7 1	***************************************	······································	9	10	11	12		
L	L	LT		-	R	LT		R		
199	1		05-4-00114-C**-4-0-4-00-4-67-4-00100		0	32		152		
	737				······································	198		475		
			*****************			ļ		0.32		
								1.40		
<del>,,</del>								16.1		
					***************************************			T C		
***************************************					ind.	<u> </u>	180			
82 CO.		······································			·····			,		
	DLD ATE 5/26/09 FRIDAY  STELLA RIVER E ROUTE 46 E East-West  1	DLD ATE 5/26/09 FRIDAY PM PEAK HOUR  STELLA RIVER VINEYARD PROJE TE ROUTE 46 EAST East-West  THAT IS A SECTION	Site   Intersection   Site	Site Inform	DLD	Intersection	Site Information	Site Information		

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	TW	O-WAY STOP	CONTR	OL S	UMI	WARY	15700000			Machine Manuella and American	
General Information	market and the second s		Site	NA ANDERSON AND AND AND AND AND AND AND AND AND AN	Participate or the control	A CONTROL OF THE PARTY OF THE P					
Analyst	DLD		Interse			Additional Page 1 to Commission	STATE R E/JARDII	VE ROA	AD		
Agency/Co.	ATE		Jurisd	iction			SAN LUIS COUNTY		PO		
Date Performed	10/16/08		Analys	eie Vas	ar.		CUMULA		2030	)}	
Analysis Time Period	FRIDAY I	PM PEAK HOUR	Allaly	313 1 50	aı		00141027	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,	
Project Description ES			DJECT #08031								
East/West Street: STAT		EAS!	North/South Street: JARDINE ROAD								
Intersection Orientation:	no transfer anni a Commission Contraction of All Co		Study Period (hrs): 1.00								
Vehicle Volumes ar	ıd Adjustme						101 11				
Major Street		Eastbound	1			A	Westbou	<u>na</u>		6	
Movement	1	<u> </u>	3 R			4 L	5 T			R	
( Laluna ( wah /h)	371	2089	1 2			<u>L</u>	2322			31	
Volume (veh/h) Peak-Hour Factor, PHF	0.92	0.92	0.92	)	1	0.92	0.92			.92	
Hourly Flow Rate, HFR (veh/h)	403	2270	2			0	2523	Alaka	MANDETT.	33	
Percent Heavy Vehicles	4	-3-70				4			est.	ar m	
Median Type		<u> </u>	Two V	Vav Le	eft Tu	ırn Lane					
RT Channelized		DESCRIPTION OF THE PROPERTY OF	0							1	
Lanes	1 1	2	1 0		1		2		1		
Configuration	<del>                                     </del>		TR				T		NEW YORK OF THE PERSON NAMED IN COLUMN TO PE	R	
Upstream Signal		0		MARKAGO CONTRACTOR			0				
Minor Street		Northbound	1	Southbound				ınd			
Movement	7	8	9		10		11		~~	12	
INIO A CILICIE	L	T	R			L	NEQUE OF THE PERSON		R		
Volume (veh/h)	1 0	0	1 0			34	0	315		115	
Peak-Hour Factor, PHF	0.92	0.92	0.92	)		0.92	0.92	<u> </u>		.92	
Hourly Flow Rate, HFR (veh/h)	0	0	0			36	0	0 :		142	
Percent Heavy Vehicles	4	4	4			4	4			4	
Percent Grade (%)		0	Children and American				0				
Flared Approach		N			Ī		N				
Storage		0			ĺ	***************************************	0				
RT Channelized		Annicy (MESSANIES CONTRACTOR CONT	1 0			Lassacomere				0	
Lanes	0	1	1			0	1			1	
Configuration	LT	shallahiissi qaaqayaa qaanaa qaanaa qaanaa qaanaa qaada q	TR			LT				R	
Delay, Queue Length, a	XX	rvice	1	ja (1917)						nus us es	
Approach	Eastbound	Westbound		Northb	ounc		S	outhbo	und		
Movement	1	4	7	8	}	9	10	11		12	
Lane Configuration	L	L	LT	1		R	LT			R	
v (veh/h)	403	0	0			0	36			342	
C (m) (veh/h)	170	215		1		193				158	
v/c	2.37	0.00		J		0.00				2.16	
	121.48	0.00		<b> </b>		0.00		Name of the last o		97.27	
95% queue length		21.7	and remains to the state of the	<u> </u>	A STATE OF THE STA	23.7	, pp. processor and a second distribution of the			2166	
Control Delay (s/veh)	2529			<u> </u>		<del></del>				F	
LOS	<u></u>	С		<u></u>	odence vozneno	<u> </u>				Γ	
Approach Delay (s/veh)	**************************************										
Approach LOS		nairaide									

	TW	O-WAY STOP	CONTR	OL SU	JMW	ARY			
General Information			Site II	ıform	atio	n			
Analyst Agency/Co. Date Performed Analysis Time Period	DLD ATE 5/26/09	PM PEAK HOUR	Interse	ction	and the first of t		STATE RO E/JARDIN SAN LUIS COUNTY CUMULAT +PROJEC	E ROAL OBISP( TIVE (20	) )
gm - 3		//NEVARE REQUI	=07.#090	24			VIII-		
Project Description ES East/West Street: STAT			North/9	outh S	Street:	JARDIN	F ROAD		
Intersection Orientation:		701	Study I						
Vehicle Volumes an	**************************************	3fe			<u> </u>				
Major Street	ia Valazmiei	Eastbound		T			Westbour	nd	
Movement	1	2	3			4	5		6
MOVOLLOUG	L	T	R			<b>1</b>	T		R
Volume (veh/h)	381	2089	2			0	2322		32
Peak-Hour Factor, PHF	0.92	0.92	0.92		0.92		0.92		0.92
Hourly Flow Rate, HFR (veh/h)	414	2270	2			0	2523		34
Percent Heavy Vehicles	4		<u> </u>			4			
Median Type			·	Vay Le	ft Tur	n Lane			
RT Channelized	AAA OA SISIELIA		0			HALIOCANIN (***)			1
Lanes	1	2	0			1	2		1
Configuration	L	P	TR			<u>L</u>	Ţ		R
Upstream Signal		0					0		
Minor Street		Northbound					Southbou	and the second s	
Movement	7	8	9			10	11_		12
			R			L	T		R
Volume (veh/h)	0	0	0			35	0		321
Peak-Hour Factor, PHF	0.92	0.92	0.92	)		0.92	0.92		0.92
Hourly Flow Rate, HFR (veh/h)	0	0	0			38	0		348
Percent Heavy Vehicles	4	4	4			4	4		4
Percent Grade (%)		0					0		The second secon
Flared Approach		N					<u> </u>		
Storage		0				- CONTRACTOR OF THE CONTRACTOR	0		
RT Channelized			0					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0
Lanes	0	1	1			0	1		1
Configuration	LT		R			LT		ACCOUNTS TO THE PROPERTY OF TH	R
Delay, Queue Length, a	nd Level of Se	rvice	O. C.						
Approach	Eastbound	Westbound		Northb	ound	No.	S	outhbou	
Movement	1	4	7	8	3	9	10	11	12
Lane Configuration	L	L	LT			R	LT		R
v (veh/h)	414	0	0			0	38		348
C (m) (veh/h)	170	215				193			158
V/C	2.44	0.00				0.00			2.20
95% queue length	126.89	0.00		1		0.00			100.21
Control Delay (s/veh)	2645	21.7				23.7			2233
	F	C C		<del> </del>		C	<u> </u>		F
LOS	, , , , , , , , , , , , , , , , , , ,	<u> </u>	······································	<u> </u>				L	
Approach Delay (s/veh)	and the	un tid					<u> </u>		
Approach LOS				JCS+TM				erated: 5/2	6/2009 2:32 P